

## REMARKS

In accordance with the foregoing, the specification, FIGS. 1, 2, 12, and 17 and claims 1, 8, and 9 have been amended, and new claim 10 has been added. Claims 1-10 are pending, with claim 1 being independent. No new matter is presented in this Amendment.

### Drawing Objections and Drawing and Specification Amendments

FIGS. 1, 2, and 12 have been objected to as failing to conform to 37 CFR 1.84(p)(1) and 37 CFR 1.84(q), and FIGS. 2 and 12 have been objected to as failing to conform to 37 CFR 1.84(p)(3), because of the specific deficiencies identified in paragraph 2 on page 2 of the Office Action of November 15, 2007. Accordingly, FIGS. 1, 2, and 12 have been amended to correct the deficiencies identified by the Examiner, and paragraphs [0007] and [0068] of the specification have been amended to be consistent with the changes made to FIGS. 1, 2, and 12. Accordingly, it is respectfully requested that the objection to the drawings be withdrawn.

Although FIG. 17 was not objected to, FIG. 17 has also been amended to comply with 37 CFR 1.84(p)(1) and 37 CFR 1.84(q) by eliminating deficiencies similar to those identified by Examiner with respect to FIG. 1.

### Claim Rejections Under 35 USC 101

Claims 1-9 have been rejected under 35 USC 101 as being directed to non-statutory subject matter. This rejection is respectfully traversed.

The Examiner has set forth two different bases for the rejection under 35 SC 101.

### First Basis for Rejection Under 35 USC 101

In explaining the first basis for the rejection under 35 USC 101, the Examiner states as follows on page 6 of the Office Action of November 15, 2007:

The computer-readable medium of claim 1 appears to store only nonfunctional descriptive material. See MPEP 2106.01.

MPEP 2106.01 referred to by the Examiner provides as follows in pertinent part on MPEP page 2100-17:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)(discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency) and *In re Warmerdam*, 33 F.3d 1354, 1360-61, 31 USPQ2d 1754, 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

In response to the arguments traversing this rejection on pages 12-14 of the Amendment of September 5, 2007, the Examiner states as follows on pages 2 and 3 of the Office Action of November 15, 2007:

Applicant's arguments regarding rejections under 35 U.S.C. 101 have been fully considered but they are not persuasive. The computer-readable medium appears to store only nonfunctional descriptive material. The markup document appears to be used to used when reproducing the AV data, but does not appear to provide reproduction functionality. For example, Figure 6 shows that the markup document is read and the markup document defines display information, but it does not provide reproduction functionality. The control information of claim 1 is not required to include [sic] functionality recited in the dependent

claims. It appears that nonfunctional descriptive material (information identifying the buffering state) satisfies the limitation.

It is submitted that the Examiner's statement that "[t]he markup document appears to be used to used when reproducing the AV data, but does not appear to provide reproduction functionality" is not correct because the AV data cannot be reproduced in the interactive mode without the markup document. Therefore, it is submitted that the markup document does in fact provide reproduction functionality for reproducing the AV data in the interactive mode.

Also, it is submitted that the Examiner's statements that "[t]he control information of claim 1 is not required to include functionality recited in the dependent claims" and that "[i]t appears that nonfunctional descriptive material (information identifying the buffering state) satisfies the limitation" is not correct because the control information of claim 1 is required to identify the buffering state information. Accordingly, it is submitted that the control information of claim 1 is in fact required to provide functionality recited in the dependent claims.

In any event, although the rejection is considered to be improper for at least the reasons discussed above, claim 1 has been amended to read as follows in an effort to eliminate this issue and advance the prosecution of the application (emphasis added):

1. A computer-readable medium usable with an apparatus comprising a buffer, the computer-readable medium having recorded thereon:

audio video (AV) data;

a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus; and

control information to enable the apparatus to identify buffering state information of the markup document to be preloaded into the buffer of the apparatus, the buffering state information being used by the apparatus in reproducing the AV data in the interactive mode selected by the user.

It is submitted that at least the underlined portions of claim 1 impart functionality when the computer-readable medium of claim 1 is employed as a component of the apparatus recited in claim 1. Accordingly, it is submitted that the computer-readable medium of claim 1 stores functional descriptive matter under the guidelines set forth in MPEP 2106.01 relied on by the Examiner, and is therefore directed to statutory subject matter under 35 USC 101.

Second Basis for Rejection Under 35 USC 101

In explaining the second basis for the rejection under 35 USC 101, the Examiner states as follows on page 6 of the Office Action of November 15, 2007:

Claims 1 – 9 are directed to a signal directly or indirectly by claiming a medium and the Specification ([¶ 95] recites evidence where the computer readable medium is defined as a "wave" (such as a carrier wave). In that event, the claims are directed to a form of energy, which at present the office feels does not fall into a category of invention.

Paragraph [0095] of the specification referred to by the Examiner reads as follows:

**[0095]** It is understood that a system which uses the present invention also includes permanent or removable storage, such as magnetic and optical discs, RAM, ROM, a carrier wave medium, etc., on which the process and data structures of the present invention can be stored and distributed. The operations can also be distributed via, for example, downloading over a network such as the Internet.

This paragraph does not specifically refer to a "computer-readable medium" as now recited in claims 1-7, but refers to "permanent or removable storage," one example of which is "a carrier wave medium."

The Examiner's statement that "in that event, the claims are directed to a form of energy, which at present the office feels does not fall into a category of invention" appears to indicate that this portion of the rejection under 35 USC 101 is based on the decision of *In re Nuijten*, 500 F.3d 1346, 84 USPQ2d 1495 (Fed. Cir. 2007), which is a split decision of a three-judge panel of the Court of Appeals for the Federal Circuit decided on September 20, 2007, after the Amendment of September 5, 2007, was filed, and held that Nuijten's signal claims are not patentable subject matter under 35 USC 101. However, it is submitted that the law is hardly settled on this issue, and it is unlikely that Nuijten will be the last word on this issue.

However, solely in an effort to eliminate this issue and advance the prosecution of the application, paragraph [0095] has been amended to delete "a carrier wave medium" from the examples of "permanent or removable storage," and to recite instead that "[t]he process and

data structures of the present invention can also be distributed via, for example, downloading over a network such as the Internet, or transmitted via a carrier wave."

#### Conclusion—Claims Rejections Under 35 USC 101

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 1-9 under 35 USC 101 be withdrawn.

#### Claim Rejections Under 35 USC 102(b)

Claims 1, 8, and 9 have been rejected under 35 USC 102(b) as being anticipated by Sullivan et al. (Sullivan) ("Programming with the Java Media Framework"). This rejection is respectfully traversed.

It is submitted that Sullivan does not disclose "a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus" as now recited in independent claim 1.

The Examiner considers page 75, paragraphs 1-2, and page 78, paragraphs 1-3, of Sullivan to disclose "a markup document which was provided to reproduce the AV data in an interactive mode" as previously recited in claim 1. Page 75 of Sullivan discloses a Java applet known as VideoApplet that plays a video file. Page 78 of Sullivan discloses an applet known as ScriptableMediaApplet that plays a video file, and is designed to be scriptable by JavaScript. However, the Examiner has not identified where pages 75 and 78 of Sullivan disclose "an interactive mode" as recited in claim 1. Both VideoApplet and ScriptableMediaApplet have a parameter "controlpanel" that determines whether or not a VCR control panel should be displayed. Page 79 of Sullivan states that "[o]n a web page, it is easy to add HTML FORM buttons that start and stop the video." Assuming *arguendo* that these portions of Sullivan may be considered to disclose "an interactive mode" as recited in claim 1, it is submitted that this interactive mode is not "an interactive mode selected by a user of the apparatus" as now recited in claim 1 because a user of the apparatus has no control over whether the VCR control panel is displayed or the HTML FORM buttons that start and stop the video are provided. Rather, this decision is made by the programmer.

It is submitted that Sullivan does not disclose the feature "wherein the AV data is selectable by the user to be viewed by the user while the AV data is reproduced in the interactive mode selected by the user" now recited in dependent claim 8, or the feature "wherein the interactive mode selected by the user is an interactive mode in which the user views the AV data" now recited in dependent claim 9.

The Examiner considers pages 75 and 78 of Sullivan to disclose the feature "wherein the AV data is AV data that was selected by a user to be viewed by the user while being reproduced in the interactive mode" previously recited in claim 8, and considers pages 33, 45, 75, 78, 95-97, and 177 to disclose the feature "wherein the interactive mode is an interactive mode that was selected by a user who will view the AV data in the interactive mode" previously recited in claim 9. However, the portions of Sullivan relied on by the Examiner explains how a programmer can write code to download and play a video file, and explains how the code accomplishes this. However, a user of the code does not select any AV data or select an interactive mode. Any such selections are made by the programmer.

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 1, 8, and 9 under 35 USC 102(b) as being anticipated by Sullivan be withdrawn.

#### Claim Rejections Under 35 USC 103

Claims 1-7 have been rejected under 35 USC 103(a) as being unpatentable over Landsman et al. (Landsman) (U.S. Patent No. 6,466,967) in view of Silberschatz, Avi, Peter Galvin and Greg Gagne (Silberschatz) ("Applied Operating System Concepts," First Edition, John Wiley & Sons, Inc., 2000, pp. 65-66 and 412-431), with the Examiner relying on the newly cited Goodman ("Danny Goodman's JavaScript® Handbook") and *American Heritage College Dictionary* references to support the rejection. This rejection is respectfully traversed.

MPEP 706.02(j) provides as follows:

Where a reference is relied on to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection. See *In re Hoch*, 428 F.2d 1341, 1342 n.3 166 USPQ 406, 407 n. 3 (CCPA 1970).

Accordingly, it is submitted that the Examiner was required to include the Goodman and *American Heritage College Dictionary* references in the statement of the rejection of claims 1-7 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz. Accordingly, should the Examiner repeat the rejection in the next Office Action, it is respectfully requested that the Examiner include the Goodman and *American Heritage College Dictionary* references in the statement of the rejection.

It is submitted that Landsman, Silberschatz, Goodman, and the *American Heritage College Dictionary* do not disclose or suggest "a markup document to be preloaded into the buffer of the apparatus to enable the apparatus to reproduce the AV data in an interactive mode selected by a user of the apparatus" as now recited in independent claim 1.

The Examiner considers column 9, lines 23-55; column 10, lines 5-31; and column 26, lines 43-49, of Landsman to disclose "a markup document which was provided to reproduce the AV data in an interactive mode" as previously recited in claim 1.

Column 10, lines 5-8, of Landsman discloses an HTML tag that is embedded into a referring page. This HTML tag contains a component that downloads a Java applet that in turn downloads advertising files (media and player files) and plays the files on an interstitial basis in response to a user click-stream, that is, when the user clicks a mouse to transition to a next successive content page. See column 10, lines 5-20 and 45-53, of Landsman. The other component is the web address of an advertising management system from which the advertising files are to be downloaded. See column 10, lines 20-23, of Landsman.

In paragraph 6 on pages 3 and 4 of the Office Action of November 15, 2007, the Examiner states that "Landsman teaches the advertisements are presented based on a user's actions [col. 10 lines 17 – 20]," and that "[t]herefore, advertisements presented based on a user's actions teaches the claimed interactive mode," relying on the definition of "interactive" in the *American Heritage College Dictionary*, which is, *inter alia*, "[o]f or relating to a program that responds to user activity."

However, it is submitted that the alleged interactive mode disclosed in Landsman in which advertisements are presented based on a user's actions is not "an interactive mode selected by a user of the apparatus" as now recited in claim 1 because the user has no control over whether the advertisements will be presented based on his actions because this function is implemented solely by the HTML tag that is embedded into a referring page as described in

column 10, lines 5-8, of Landsman without any participation whatsoever by the user. In fact, until the first advertising file is reproduced when the user clicks a mouse to transition to a next successive content page, the user will not even be aware that any advertising files have been downloaded because this process is transparent to the user as described in column 10, lines 13-18 and 40-45, of Landsman.

#### Conclusion—Claim Rejections Under 35 USC 103

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 1-7 (i.e., claim 1 discussed above and claims 2-7 depending therefrom) under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz as supported by Goodman and the *American Heritage College Dictionary* reference be withdrawn.

#### Patentability of New Claim 10

It is submitted that Sullivan, Landsman, Silberschatz, Goodman, and the *American Heritage College Dictionary* reference do not disclose or suggest the features "the interactive mode is a mode in which the AV data is displayed in a display window defined by the markup document; the apparatus is selectively operable in the interactive mode in which the AV data is displayed in the display window defined by the markup document, and a non-interactive video mode in which the AV data is displayed in the same manner as AV data recorded on a standard DVD; and the user of the apparatus selects between the interactive mode and the non-interactive video mode" recited in new dependent claim 10.

For at least the foregoing reasons, it is submitted that new claim 10 is patentable over Sullivan, Landsman, Silberschatz, Goodman, and the *American Heritage College Dictionary* reference, and an indication to that effect is respectfully requested.

#### Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.



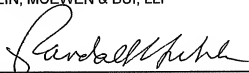
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with the filing of this paper, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

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By:   
Randall S. Svihla  
Registration No. 56,273

1400 Eye St., NW  
Suite 300  
Washington, D.C. 20005  
Telephone: (202) 216-9505  
Facsimile: (202) 216-9510

Attachments